unitary cost average adjusted by age-gender and Charlson-index was increased according to CRL category: low: €986.14; moderate: €1021.20; high: €1107.64 and very high €1328.09; $p < 0.001$. These results were obtained in all analysed components. Pharmaceutical cost represented 66.2% of the total. **CONCLUSIONS:** Subjects with high CRL showed older age, high morbidity (diabetes, smoking, hypertension) and CRL presence, existing gender differences (man) with high consume of sanitary resources. There are a high margin of improvement in the primary prevention of health, were should be established cost-effective measures to promote intervention strategies in this patients collective.

PCV64

INDEX, FOLLOW-UP AND TOTAL HOSPITALIZATION COSTS IN PATIENTS WITH ACUTE CORONARY SYNDROMES UNDERGOING PLANNED PERCUTANEOUS CORONARY INTERVENTION TREATED WITH PRASUGREL VS. CLOPIDOGREL IN THE TRITON-TIMI 38 TRIAL

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OBJECTIVES: The TRITON-TIMI 38 Trial demonstrated that in patients with acute coronary syndromes (ACS) undergoing planned percutaneous coronary intervention (PCI), prasugrel compared to clopidogrel significantly reduced the rate of ischemic events over up to 15 months of follow-up, but increased the risk of major bleeding. We used patient-level resource use data to estimate and compare index, follow-up and total hospitalization costs, exclusive of study drug, for patients treated with prasugrel vs. clopidogrel in TRITON-TIMI 38, both in the overall trial population and among selected subgroups. **METHODS:** For the economic study for TRITON, details regarding hospitalizations for all patients from 8 high enrolling countries (U.S., Australia, Canada, Germany, Italy, Spain, U.K., France; n = 3373 prasugrel, 3332 clopidogrel) were collected prospectively. These data were used to assign DRGs to all index and subsequent hospitalizations, to which average 2005 Medicare reimbursement rates were applied. Physician costs associated with all hospitalizations were estimated based on the DRG-specific ratio of physician reimbursement to hospital costs. Estimates of incremental costs associated with PCI-associated periprocedural MIs and PCI and CABG associated bleeding events were added separately based on published data from similar patient populations. **RESULTS:** For the entire 8 country population, treatment with prasugrel was associated with a $613 per patient mean reduction in overall hospitalization costs, reflecting a $7/patient increase in index hospitalization costs (components of which included a $38/patient increase in costs associated with periprocedural bleeds and a $18/patient decrease in costs resulting from a reduction in periprocedural MI) and $620/patient reduction in follow-up cost savings due primarily to prevention of MI and revascularization procedures. Among the subgroup of patients (n = 5270, 79%) who had no risk factors for increased bleeding (i.e., prior stroke or TIA, age >75 yrs, and weight <60 kg), prasugrel was associated with a $43/patient increase in initial hospital costs ($43/patient increase due to periprocedural bleed and $21/patient decrease due to periprocedurlal MI). During followup, costs associated with MI and repeat revascularizations were $872/patient lower with prasugrel, while costs associated with follow-up bleeding events were $74/patient higher; aggregate hospitalization costs were $637/patient lower with prasugrel for this subgroup. Among the subgroup with 1 or more risk factors for increased bleeding, initial hospitalization costs were lower by $130 with prasugrel (despite an average $20 increase in costs due to periprocedural bleeds), and overall follow-up costs were $395 lower, resulting in aggregate savings of $525/patient. **CONCLUSIONS:** For ACS patients undergoing planned PCI, the lower ischemic event rate with prasugrel compared to clopidogrel yields a reduction in overall hospitalization costs, despite increased costs associated with bleeding. These findings were accentuated among the large subgroup of patients with no risk factors for increased bleeding. These results will have implications for the cost-effectiveness of alternative antiplatelet strategies for ACS patients undergoing PCI.

PCV65

COSTS OF BLEEDS ASSOCIATED WITH TREATING ACUTE CORONARY SYNDROME PATIENTS IN GERMANY

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OBJECTIVES: To estimate the costs to manage bleeds in hospitalized acute coronary syndrome (ACS) patients in Germany treated with antithrombotics, antiplatelet, and fibrinolytic therapies. treated with antithrombotics, antiplatelet, and fibrinolytic therapies. **METHODS:** Retrospective hospital chart review of ACS patients identified with one of following bleeds: symptomatic intracranial haemorrhage (IH), retroperitoneal haemorrhage (RH), gastrointestinal haemorrhage (GH), decrease in Hb greater or equal to 3 g/dL (DH), puncture site bleed (PS), or transfusion of greater than or equal to 2 units of blood product. Reason for admission, length of stay (LOS), diagnostic procedures, and transfusion related resources were counted and costed using unit estimates based upon German DRGs and procedures. Bleed related LOS was calculated using the reported date of bleed until discharge. **RESULTS:** Records of 61 consecutive ACS patients were included in the study. Average age was 68.6 with 60% males. Patients were classified as: 1 IH, 3 RH, 10 GH, 14 DH, 31 PS and 2 with transfusions. The average LOS ranged between 6 and 13.5 days but ranged up to 23 days. The average bleed-related LOS ranged from 5 to 12 days. Average costs by type of patient classification were: IH €3739, RH €5467, GH €5172, DH €3336, PS €3380, transfusions €6366. Average cost overall patients was €3879 of which €3004 occurred after the bleed date. LOS and resource use details allow hospitals to estimate their own internal costs of antithrombotics, antiplatelet, and fibrinolytic therapies. **CONCLUSIONS:** German hospitals are paid by case severity and diagnosis of patients. Understanding the full costs of managing ACS patients and avoiding bleeds may help control hospital costs.

PCV66

COST SAVINGS OF CORONARY CT ANGIOGRAPHY VS. CARDIAC CATHETERIZATION TO EVALUATE PATIENTS WITH AN ABNORMAL OR NONDIAGNOSTIC STRESS TEST

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OBJECTIVES: We evaluated the potential costs or cost-savings of coronary CT angiography (CTA) in a hypothetical patient population with varying degrees of coronary artery disease (CAD) prevalence. **METHODS:** We developed a mathematical model to evaluate the potential costs associated with coronary CTA after an equivocal or non-diagnostic exercise stress

echocardiography (stress echo), exercise stress nuclear scintigraphy (stress nuclear), or exercise treadmill test (ETT) study. The model was developed to evaluate the potential cost savings of coronary CTA vs. cardiac catheterization in patients who have an abnormal or non-diagnostic test result. **RESULTS:** A strategy utilizing coronary CTA to evaluate patients with an abnormal or non-diagnostic stress echo, stress nuclear, or ETT study was cost-saving compared with a conventional strategy of cardiac catheterization for these patients, up to a CAD prevalence rate within the study population of ≤33–72%, depending on the costs assumptions used in the model. **CONCLUSIONS:** An evaluation strategy that uses coronary CTA for the primary evaluation of patients with abnormal ETT, stress echo, or stress nuclear test may reduce costs in a patient population with a low to intermediate prevalence of CAD.

PCV67

CLINICAL CHARACTERISTICS, MEDICATION AND COSTS IN ACUTE HEART FAILURE PATIENTS IN THE CZECH REPUBLIC

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OBJECTIVES: Acute heart failure (AHF) is life a threatening disease which includes variable causes and complications. The aim was to assess clinical characteristics, medication and costs during hospitalization in patients with AHF. **METHODS:** Patients hospitalized in a cardiological dpt. of the Faculty Hospital Brno in January 2005–July2007 were classified according to the Guidelines on the diagnosis and treatment of AHF by the European Society of Cardiology and their medication was followed at admission and during the stay. In-patient care costs include flat rate of admission, stay and medicinal procedures. (1€ = 25 CZK) **RESULTS:** In total, 1213 patients (57.5% male, mean age 72.5 years) with AHF were analyzed. The chronic medication involved diuretics in 51%, less than half used antiplatelet drugs, beta-blockers and ACE-I; statins (28.3%), nitrates (23.6%), digoxin (21.8%). Positive inotropics were indicated in acute state: norepinephrine (20.4%), dopamine (11.4%), dobutamine (10%), epinephrine (9.5%) and levosimendan (4.8%). New-onset AHF (57%) was more common than decompensated AHF and was concerned with higher costs. AHF with mild signs and symptoms prevailed (49.3%), pulmonary oedema and cardiogenic shock were both in 13%. Total direct in-hospital expenses were €4.4 million; mean in-patient cost was €3621. The most expensive were patients in cardiogenic shock with only 3 days of hospitalization (overall mean length-of-stay 8.2 days). The predictors of high costs were antiarrhythmic interventions (PM and ICD; 5.9% patients) making up to 21% of total expenses and revascularizations (coronary angiography followed by PCI in 31.5% patients) which made 41% of total expenses. **CONCLUSIONS:** The treatment of heart failure patients uses 1–2% of health care budget in developed European countries of which 2/3 are being spent on hospitalizations. AHF hospitalization is more frequent as the population ages (62% patients were more than 70 years old) and is associated with poor prognosis (in-hospital mortality 14.5%).

PCV68

IMPACT OF DRUG ELUTING STENTS ON CLINICAL AND ECONOMIC OUTCOMES IN AN UNSELECTED INTERVENTIONAL PRACTICE

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OBJECTIVES: To assess clinical and economic outcomes of PCI following the commercial availability of drug-eluting stents (DES). **METHODS:** We identified all patients undergoing PCI from 2000–2002 (pre-DES era) and from 2004—April 31, 2006 (DES era) in a large PCI registry that includes demographic, clinical, angiographic, procedural and outcome information. Administrative data were used to estimate length of stay (LOS) and procedural costs, as well as cardiac hospitalization costs during year follow-up. We used logistic and Cox proportional hazard models to estimate the adjusted risk of adverse events within propensity score stratum and generalized linear modeling to predict LOS, procedural and follow-up hospitalization costs by treatment era. **RESULTS:** We compared 3422 patients from the DES era (mean age 67, 69% male) and 4303 patients from the pre-DES era (mean age 67, 70% male). 90% of pre-DES era patients had bare-metal stents implanted; whereas 83% of DES era patients had DES. Adverse event rates were similar between time periods (adjusted odds ratio for in-hospital myocardial infarction (MI) in DES era: 0.79; 95% CI 0.62, 1.00). During a median 22 month follow-up, the adjusted incidence of death or MI was similar between cohorts, but follow up procedures were reduced in the DES era (hazard ratio for target lesion revascularization in DES era vs. pre-DES era: 0.58; 95% CI 0.50, 0.68). Models predict a mean LOS reduction of 0.40 days in the DES era and procedural cost savings of $2053 (95% bootstrapped CI of adjusted mean difference: –2937, –1197). Follow-up cardiac hospitalization costs were similar. **CONCLUSIONS:** In a large unselected PCI cohort, the introduction of DES was associated with improved clinical outcomes during follow-up and reduced in-hospital costs. These data suggest costly new technologies can be introduced into a general practice setting while maintaining and improving patient outcomes at an incremental cost savings.

PCV69

COST-EFFECTVENESS OF ENDOVASCULAR ANEURYSM REPAIR VERSUS OPEN SURGICAL REPAIR: NON-RUPTURED INFRARENAL ABDOMINAL AORTIC ANEURYSM IN AN ELECTIVE SETTING

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OBJECTIVES: To determine the cost-effectiveness of endovascular aneurysm repair (EVAR) versus open surgical repair (OSR) for non-ruptured, infrarenal abdominal aortic aneurysm (AAA) in an elective setting. The analysis was conducted for the recent appraisal of EVAR by the National Institute for Health and Clinical Excellence in England and Wales. **METHODS:** A two-stage cost-utility model was developed from an NHS perspective to capture the lifetime costs and health outcomes of EVAR. The model population represented a 70-year old, fit for open surgery, with an AAA at least 5.5 cm in diameter. A decision-tree model captured the short-term costs and health outcomes of patients during the first 30-days post-repair, followed by a Markov model, with monthly cycles during the first 24 months and yearly cycles thereafter, until death. Clinical endpoints included mortality and complications. Primary data were derived from the EVAR I randomised controlled trial where reported. To reflect current clinical practice other sources including retrospective patient data were used. Costs were applied from trial data and national reference sources. A discount rate of 3.5% was applied to costs and health outcomes. Univariate and multivariate sensitivity analyses were performed for all parameters. An incremental cost-effectiveness ratio (ICER) reflecting incremental lifetime costs per quality adjusted life year (QALY) gained was calculated for the